

To the House Committee on Energy and Technology:

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Benefits to the Michigan Economy that can be derived from enactment of House Bill 4608

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This Bill when enacted will specify the annual amounts of renewable energy that our Utilities must provide by purchase from commercial renewable energy providers.

1. Because there is no fuel required to produce the electricity from these sources, money will be saved. These dollars would have been exported from the State of Michigan.

Suppose Michigan has to build a 500 megawatt electric power plant to meet peak demand.

It would consume 770,000 tons of coal per year.

Low-sulfur coal costs \$68.60 per ton

Fuel cost for our 500 megawatt plant would be \$52.8-million per year.

Building and operating 250 - 2 megawatt (MW) wind turbines would save this much each year.

This is a good reason for enacting HR-4608

2. Installing and operating wind turbines in the State will generate jobs. Engineering, design, construction, and operating jobs would be the main thrust. Perhaps there would be manufacturing jobs in future

For example 400 workers were involved during construction of a 108-turbine wind farm in S.E.Colorado. Now 17 full time employees operate the system.

This is a good reason for enacting HR-4608

3. Additional electric generating capacity will be needed in Michigan by 2009. MPSC's Capacity Need Forum Study indicated 400 to 500 MW additional capacity is needed.

At least 6 years lead time is required to design, build and bring a new power plant on line.

4. Wind farms can be up and running within two years. Several wind farms in advanced planning stages are awaiting the go ahead from M.I.S.O. For example Noble Environmental Power plans to have 32 turbines operating in Huron County. Power output from these wind farms must be purchased by the utilities however. This is a good reason for enacting HR-4608

5. Renewable energy power plants are smaller than conventional types so that a number of plants distributed about the State in high wind areas will be the norm in future. Transmission lines connecting wind farms to the grid will be necessary.

6. Manufacturing wind turbines in Michigan can become feasible when the market is about 500 megawatts per year. With the potential for wind power in Michigan estimated at 16,000 MW, this would mean a manufacturing potential of 8000 2-MW turbines, and sales potential of over \$12-billion total.

Thank you for allowing me to address the Committee on Energy and Technology.

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